ON THE

RELATIVE VALUE

OF

HUMAN LIFE

IN

DIFFERENT PARTS OF CANADA.

BY

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(Extracted from the Canadian Naturalist.)

Montreal:

PRINTED BY JOHN LOVELL, AT HIS STEAM PRINTING ESTABLISHMENT,

ST. NICHOLAS STREET.

1859.

ON THE

RELATIVE VALUE OF HUMAN LIFE.

While the naturalists and geologists of the Royal Mount throw light on each other's studies in reference to extinct Palliobranchiates or recent Gasteropods, it may not be out of the province of this Journal to record facts in reference to living men and women; and those who would have been living had not the teachings of modern science been disregarded, or considered as of secondary importance to the pursuit of money or of power.

The exact connection between those sanitary conditions over which man has control, and the actual number of deaths in any town or district, is no longer a matter of hypothesis. The very accurate system of registration of births and deaths which has been carried out in England for more than 20 years, and of which classified returns are regularly published by the Registrar-general, has enabled chemists, physiologists, statisticians and other sanitary reformers to compare their theories with recorded facts, and to check off their reasonings, by the average of a long series of years. The following instance will shew the precision with which sanitary reformers can now predicate the rate of mortality according to the external circumstances of drainage, ventilation, &c. While Mr. P. H. Holland was registrar of the southern portion of Manchester (called Chorlton-upon-Medlock) he went through each district, tabulating each street, court, &c., in three columns, judging by his senses and knowledge what their rate of mortality was likely to be. In each street he also made a threefold division of the houses, according to their character. Here therefore were *nine* divisions, to each of which he assigned a *supposed* proportion of deaths to population. He then directed his clerk to tabulate the *actual* deaths in each of these divisions, taking the average of five years. On comparing the theory and the facts together, *in no case did they vary more*

han one-half per cent. The following are the results, omitting the fractions:—

Deaths per 1,000 inhabitants in	Best houses.	Middling houses.	Worst houses.
Best streets.....	19	22	27
Middling streets.....	18	26	28
Worst streets.....	..	28	40

Thus the inhabitants of the best houses, in the best streets, live *more than twice as long* as those in the worst houses of the worst streets.

The existing state of knowledge in England on these subjects, may be gained (1) from the quarterly and annual reports of the Registrar-general; (2) from the reports of Her Majesty's Commissioners on the Sanitary Condition of the working classes, and on the Health of Towns; (3) from local reports and tracts published by the various Health-of-Towns' Associations. The present laws of England will be found in the "Public Health Act," and especially in the "towns-improvement clauses." All these documents could be obtained, either gratuitously or at a very moderate expense, on application to "P. H. Holland, Esq., H. M. Commissioner for Burial Grounds, Burial Board, Whitehall, London, England." They would form a very important addition to the public libraries of every Canadian city.

It is not to be expected that in a newly settled country, where the population greatly fluctuates, according to the accidents of immigration or commercial prosperity, the same accuracy of detail can be arrived at. But, by collecting the facts already accessible, we can both take measures to guard against errors in future returns, and shew the necessity of immediate sanitary regulations.

For the year 1851, we are in possession of tables, very carefully drawn out, both of the population and of deaths, arranged according to different ages and conditions, in the various cities and districts of Upper and Lower Canada. By comparing these, one with another, and taking the average number of deaths for every thousand inhabitants during the year, we obtain the following results; the fractions here, as elsewhere, being disregarded.

For the purposes of comparison, statistics are added from England, where the returns are most accurately made, and the causes of error most carefully guarded against; and from the last official Registration Report of Massachusetts, as being a long settled State,

in climatal conditions not very dissimilar to those of Canada. The general mortality of the principal part of Rhode Island is also added, from the Government Report.

Census of 1851.	Total population.	Total deaths.	Deaths per 1,000 inhabit's.	Percentage of total deaths.	
				Under 5 years.	From Xymotic disease.
All Canada.....	1,842,265	19,449	10¼	43	2
Upper Canada.....	952,004	7,775	8	42	2
Do. less 5 large cities...	880,737	6,754	7½	41	2
Toronto.....	30,775	474	15	52	1
Hamilton.....	14,112	172	12	47	4
Kingston.....	11,585	185	16	56	8
Ottawa.....	7,760	90	11½	48	2
London.....	7,035	100	14	49	2
Lower Canada.....	890,261	11,674	13	43	26
Do. less 2 large cities...	790,494	8,632	11	39	28
Montreal.....	57,715	1,978	34	43	15
Quebec.....	42,052	1,064	25	69	37
English Rural Dis..1841	3,440,501	66,575	19	..	..
Forty large towns. "	3,759,186	96,999	26	..	..
Liverpool parish. 1840–2	.....	.....	35	54	..
Bristol city ..... "	.....	.....	26	42	..
" Rural Dis... "	.....	.....	19	33	..
" U. Clifton.. "	.....	.....	16	25	..
" L. Clifton.. "	.....	.....	34	51	..
Massachusetts 1853–1857	1,132,369	20,905	18	39	27
15 cities in do. above 10,000 inhabitants.	417,838	9,310	22	46	..
Whole State, less 15 cities.... "	714,531	11,595	16	34	..
Boston..... "	160,490	4,195	26	47	..
Charlstown ..... "	21,700	505	23	48	..
Fall River..... "	12,680	382	30	54	..
Springfield ..... "	13,788	265	12	47	..
Rhode Island State. 1853	118,722	1,126	9	..	28

Confining our attention at present to the third column, that of comparative mortality, we cannot but be surprised at the two following results: (1) the extreme healthiness of the country districts generally, and of the cities in Upper Canada; and (2) the extreme mortality of Montreal, notwithstanding the beauty of its streets and the substantial comfort of its mansions. It is natural to suppose that some peculiar disaster that year befel the city, from which the rest of the Province was exempt. Let us endeavour, therefore, to see how far the same ratio holds in other years.

In the Prothonotary's office are tabulated, year by year, the number of deaths and the increase of population by birth; Ottawa, Vaudreuil, Two Mountains, Terrebonne, Leinster, Berthier,

Richelieu, St. Hyacinthe, Rouville, Verchères, Chambly, Huntingdon, Beauharnois, Missisquoi, Stanstead, and Shefford, containing a population of 428,588 souls, according to the census of 1851; partly rural, partly gathered into towns; subject to the same climatal relations as Montreal, and inhabited by a people having the same religion and habits of life. The balance of wealth and the means of comfort are obviously in favour of the city. If Montreal has more than its share of sick persons, through the attraction of the hospitals, the same is true of Quebec and Toronto. Moreover, it is proverbial how long persons live in these establishments, owing to the kind and watchful nursing of the Sisters of Charity. And whatever increased mortality may be due to this cause, is probably more than counterbalanced by the number of consumptive patients who are sent out of the city into the country to die. The following are the returns, commencing with 1851, when first we have an accurate census of population. It will be remembered that 1852 was the year of the great fire, and 1854 of the cholera.

Years.	MONTREAL CITY.				COUNTRY DISTRICTS.			
	Total population.	Excess of births over deaths	Total deaths	Deaths per 1000	Total population.	Excess of births over deaths	Total deaths.	Deaths per 1000
1851	57715	+ 918	1978	34	428588	+11423	5853	14
1852	58633	+1053	1992	34	440011	+11093	6326	14
1853	59686	+ 763	2278	38	451104	+11280	6525	14
1854	60449	— 463	3739	62	462384	+ 8316	8731	19
1855	59986	+1028	2231	37	470700	+ 8586	7869	17
1856	61014	+1262	2284	37	479286	+ 9564	7184	15
1857	62276	+1438	2367	38	488850	+ 9447	7380	15
1858	63714	+1495	2299	36	498297	(+ 9447)*	(7521)*	15
Total	483473	+7494 or 16 per 1000	19168	40	3719220	+80156 or 22 per 1000	57389	15
do. less 1854	423024	+7957 or 19 per 1000	15429	36	3256836	71840 or 22 per 1000	48658	15

* The registration districts having been altered in 1858, these numbers are inserted hypothetically to complete the average.

It is not pretended that these tables are precisely correct. Absolute accuracy is of course unattainable in a country where there is no compulsory system of registration; the yearly returns of births and deaths being simply the records kept of religious ceremonies. In the country districts of Upper Canada, doubtless a large number of infants are born and corpses interred without any other record than in the family bible, if indeed in that. Still, each of the Upper Canadian cities, where deaths at least are recorded, shows so healthy a condition that the mortality of the country is probably not much greater than that recorded. But in Lower Canada, where the religious habits of the Catholic population almost

compel resort to the font and to the cemetery, we may regard an average of 7 years as a fair criterion of its sanitary condition.

On examining the tables for the country districts, we find an extremely rapid rate of increase, being no less than 22 per thousand each year. This speaks well, not only for the morality and industry of the inhabitants, but also for the resources of the country. The mortality, however, appears slightly on the increase, and presents an average considerably above the mortality of the whole province in 1851. This average is not essentially disturbed by the cholera year. It is probable that the extra mortality of the rural districts of Lower above Upper Canada, is due not so much to the severity of the climate (which in Ottawa city closely resembles that of a large part of the Montreal District) as to the close stoving and intensely dry and heated rooms; a habit which would doubtless carry off a much larger number of victims, were it not for the extreme purity of the surrounding atmosphere.

The point, however of most *vital* importance, for it affects the lives of thousands, and the health of myriads, is the *excessive mortality of Montreal.* Not only did it present in 1851 a ratio of death greater than that of any city in Canada or New England; amounting to 8 per 1,000 over Boston, with its immense and crowded Irish population; 9 per 1,000 over Quebec, with its bleak climate, narrow streets and rock-bound courts; 20 per 1,000 over the five cities of the West, and the same over the country district, six times as populous, in the midst of which it raises its beautiful domes and spires; not only so, but its *mortality has been increasing;* and on the average of 7 years, even leaving out the terrible 1854, it presents a catalogue of deaths greater than that of Liverpool (the most unhealthy and over-crowded of English cities), in its most unhealthy epoch, before the days of sanitary reform; when 39,460 of its inhabitants lived in 7,892 *cellars;* when 55,534 fought against death in 1,982 courts, containing 10,692 houses, built back to back, one third of them *closed at both ends*, and at best provided with only a surface drainage, which might be called a fever-bed condensed.*

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* At that time the cellars were generally from 10 to 13 feet square, sometimes less than 6 feet high; often with only bare earth for a floor; frequently with no window, and the ceiling on a level with the street. Generally there was no other drainage than a cess-pool under a board, which had to be ladled out; sometimes a cess-pool of putrid matter was allowed to incubate its fevers under a sleeping bed. Sometimes a back

But it is not fair to leave out the cholera year from the average. The same poisonous gases which yearly raise the mortality from 14 to 34 or even 38 per 1,000, occasionally concentrate their energies for the development of a cholera, a ship-fever or some other pestilence. Such visitations are often looked upon as "special providences;" but they are as natural and necessary results of culpable neglect in sanitary matters, as is delirium tremens of continued intoxication, or ship scurvy of unwholesome diet. The people of Montreal must continue to lodge such visitants so long as they make homes for them in putrid emanations; and they would be deprived of what is justly their own if these pestilences were excluded, as much as if the key were turned in their market of Bonsecours or in the parish church of Notre Dame. The fire did not add to the mortality of the city; it consumed the fever-beds as well as the dwellings, and drove the people into the shelter of the fresh air. But the cholera found a congenial atmosphere in the swamps of Griffintown; it not only devoured the yearly increase of the city, but killed off 463 persons *over and above* as many as were born that year; so that for *each thousand of the* 60,000 inhabitants of the city, sixty-two human beings perished. The grave that year hastily swallowed up 3,739 living souls. The worst recorded pestilence in England during the present generation was the Famine-Fever year of 1848, in Warrington. In that year one out of every 20 inhabitants died; in the Montreal Cholera of 1854, *out of every fifteen citizens found one was dead!* A widow sad of the first visitation of the dreaded Asiatic pestilence in Bristol, that it was a "blessed cholera;" and she spoke truly, for it was the cause of the Sanitary Reform movement, which has saved its myriads of lives and will save its millions more. The fever in Warrington led to the immediate cleansing of its filth; and its inhabitants are now yearly taxing themselves large sums for investment in the underground life insurance. The people of Mon-

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cellar was used as a sleeping room, with no light or air but what could enter through the front. Each house above contained two or more families, among which one woman complained that they were "rather crowded, since the people in the next corner took lodgers." The population was huddled together to an extent *nearly three times the maximum density of London*, and consisted in great measure of the dirtiest and poorest of the Irish race. Such was Liverpool in 1841; and *more unhealthy even than this* has been Montreal from 1853 to the present time; although for five months in every year its laboratories of pestilence lie harmless in the safe prisons of the ice and snow!

treal have to this day retained their unenviable distinction as the dwellers in the city of wealth and death; and even last year their Council not only refused to lay the dust of the city, but could not draw water enough from the mighty river to allow the inhabitants to do it at their own expense!

Montreal was not the only city which was scourged by cholera. Vaudreuil and Lachine, in its immediate vicinity, shared the plague; but with how different results the following table will show.

Analysis of 3 years, 1853–1855.		Total population.	Excess of births over deaths.	Total deaths	Deaths per 1000.
1853	Lachine..	20376	+355	349	17
	Montreal..	59686	+763	2278	38
	Vaudreuil.	22647	+609	394	17
1854	Lachine..	20731	+ 53	614	29
	Montreal..	60449	—463	3739	62
	Vaudreuil.	23256	+404	556	24
1855	Lachine..	20786	+328	402	19
	Montreal..	59986	+1028	2231	37
	Vaudreuil.	23660	+192	257	11
Total for 3 years.					
1853–1855	Lachine..	61893	+736 or 12 per 1000	1365	22
	Montreal..	180121	+1328 or 7 per 1000	8248	46
	Vaudreuil.	69563	+1205 or 17 per 1000	1107	16

Several causes may be assigned for the frightful amount of mortality which the stern facts of the burial registers assign to the city of Montreal. The first of these is emigration. The emigrants are said to be a peculiarly unhealthy race of people, landed on the shore only in time to die. If that were the cause, we ought to find the mortality of Quebec greater than Montreal, as the poorest and most sickly are unable to proceed further; whereas Quebec only loses 25 to 34 who perish at Montreal. Moreover, the earlier years, when the emigrants were most numerous, were far more healthy than the later ones, when emigration has considerably slackened, and when those who arrive are much better cared for. The principal way in which the emigrants affect the returns is by increasing the population. This will probably lessen the average of later years; to what extent the coming census only can decide. It is the custom in each city to state loosely the supposed number of its inhabitants; I have not been able, however, to find any accurate returns beyond those given above. The tide of emigration affected Toronto fully as much as Montreal; yet its

mortality is *considerably less than half* that of its older sister. As an offset to the increase of population, it may be necessary to say, that, in each year but one, several of the religious bodies sent in no returns (on the average, 6 each year). It is presumed, however, that the number of deaths thus unregistered is but small.

Again, it will naturally be supposed that the free use of liquor in Montreal is a principal cause of its extreme mortality; the Catholic rural population being peculiarly sober in their habits. How great is the effect of drinking on health, the two following classes of facts will testify. The first is from an analysis of the books of eleven Sick Clubs in the town of Preston, Lancashire, of which 8 were open to all, and three were restricted to teetotalers. They are each corrected to a scale of 1,000 members.

Average of Preston Benefit Societies.	Number of members sick.	Average time of sickness.	Total weeks sick.	Cost to the Club.
Temperance clubs,	139	3 wks. 2 ds.	458	$1013
General clubs,	232	7 " 4 "	1770	$4012

The second is extracted from the "Journal de Société de la Morale Chretiènne" for Aug. 1847. The testimony is very accurately ascertained, and gives a comparison of *strong country labourers* where liquor was distributed, with *sickly inhabitants of towns* where the drink money was expended on better food. Both parties were employed on government work. In the country districts of Holstein, Mecklembourg, Oldenbourg, and Hanôvre, *where drink was given*, out of 20,952 labourers employed, 472 became sick, or one out of every 44. Whereas out of 7107 labourers from the towns of Brunswick, Oldenbourg, and the Hanseboroughs, *to whom drink was not supplied*, there were only 70 sick, or one out of every 90.

But the deaths in towns do not so much result directly from drinking, as is shown by comparing Montreal with Toronto and Ottawa, where drinking was just as much followed, and yet the mortality continued low. The usual effect of liquor is to weaken the constitution of its votaries, and thus render them an easy prey to the various forms of town disease, which abstainers are frequently able to avoid or at least to throw off.

The early exposure of infants by Catholic parents, for baptismal purposes, has also been assigned as a cause for the extreme mortality of Montreal. But this cause will affect, to an equal or even greater extent, the adjacent or rural districts; whereas, out of every 100 deaths in Montreal, 43 are of children under 5 years of

age; in the country only 37: while in the Protestant cities of Upper Canada, the mortality is much greater, varying from 47 to 56. In England the fourth column of the original table furnishes a very exact guide to the amount of preventible mortality. In Canada there appear anomalies which would perhaps be explained by an average of many years. Such is the enormous infantile mortality of Quebec, amounting to 69 out of every 100 in 1851.

The same may be said with respect to the last column, which represents the percentage of deaths arising from "xymotic" or *air-poison* diseases, which, though generated even in country places, are peculiarly destructive in towns, where they are not instantly diluted with fresh air. In England, out of every million persons living in the country, 3,422 die every year of these diseases; while of the same number living in towns, 6013, or *nearly double the number*, die from the same causes. The returns for Canada, however, will have to be corrected by an average of years; for we find healthy Hamilton losing half of its total number from these diseases, while Montreal loses only 15, and Kingston, with less than half its mortality, only 8. The town-smells, therefore, have other ways of killing-off those who inhale them than by infectious complaints, and this they do, in general, by the gradual weakening of the constitution, through which the system is unable to bear up against whatever disease happens to attack the sufferer.

It appears, therefore, by comparing the averages of Montreal and its adjacent districts, even leaving out the fever year, that there are 21 deaths in every thousand persons which might yearly be prevented; that is, on the present population of (say) 65,000 inhabitants, *the people of Montreal kill-off thirteen hundred and sixty-five of their own flesh and blood* every year, who would not die did they only pay as much attention to health in the city as they do in the country; to say nothing of hundreds of lives more which country and towns' people alike sacrifice on the altar of self-indulgence and "*laissez-faire*."

But this is not all. From the returns of the Manchester Dispensaries, it appears that to every case of death there are 28 cases of sickness. These, on the average of the Preston Sick Clubs, last 5 weeks each. Therefore the people of Montreal voluntarily tax their health to the extent of 38,220 cases of sickness *every year*, which is equal to a loss of 191,100 weeks, or 2,674 years; that amount requiring to be taken twice over, once for the suffering invalid and again for the anxious nurse.

Nor is this the whole of the evil. There is a large amount of general enfeeblement of health, which does not develope into actual disease. This brings misery on the daily life, urges to the use of poisonous stimulants, often leads to recklessness of conduct, destroys the desire and even the power of amendment, and works corruption throughout the whole fabric of society.

To the work of palliating or curing diseases, 25 physicians or other medical men honourably devote their lives, and are thankfully supported by the inhabitants, along with 15 vendors of drugs; in all, an apparatus of 40 persons devoting their energies to restoration, besides large numbers of Hospital attendants, Sisters of Charity, and other nurses employed in tending the sick. But to this day the city of Montreal does not employ a single officer of health to detect the *causes* of preventable disease, nor does she make it a requirement in the men she elects to her Municipal Council, that they should enforce those sanitary regulations which the law empowers them to carry out.

The limits and scope of this paper do not allow me to point out the special causes of this extreme mortality, nor the means required for their removal. It may be sufficient to place on record an account of a court in the Petite Rue St. Antoine, which I visited in April last in company with a Domestic Missionary. It was by no means so bad as many parts of the Griffintown suburbs. It is to be hoped that the time will soon come when this description will be as great an antiquarian curiosity as the "plague-stone" in the Warrington Museum, in a hollow of which the money was passed through vinegar to prevent transmission of infection.

We left the street through a covered passage, treading on bricks and pieces of wood through a mass of wet and decomposing manure and filth. Reaching thus the small back-yard, we found it to consist apparently of a widely-extended midden, consisting of disgusting slutch and every kind of refuse, from a few inches to some feet in thickness. On two sides, this yard was separated from two similar ones by partition fences; on the other two it was enclosed by dwellings. The inner house, or rather hovel, was divided into two; the two little rooms upstairs, inhabited by a French family at a rent of $4 a month; those below by two families, paying $3 50 for the liberty of being poisoned. The miserable rooms not only got no air but what was charged with the stenches of the yard, but just outside were several privies, too disgustingly filthy to be used, but breeding "nast" to soak through the wooden walls and

floor of the inner room. This was filled by a family, where of course there was sickness; with closed door and window, so that no air entered but what was saturated with fever-stenches. For the upper rooms of the cottage opposite, $8 a month were paid. On descending the stairs to reach the street, we had to cro s over fluid matter, stepping on bricks. The lower story, for which $6 are generally paid, was now necessarily empty, being flooded, I will not say with water, but with liquid manure, the disgusting emanations from which ascend through the stair case and between the boards, into the upper story. It was by wading on bricks through this mass of pollution that the tenant had to obtain her supply of water; this being the one only health-spot in the whole, where the pipe, rising through the fœtid drainage of the court, discharges the pure water of the Ottawa for the pallid occupants. The upper tenants had been there for 15 months, and assured me that the yard had never been cleaned during the whole time. And yet the authorities, who confiscate unwholesome meat when offered in the shambles, allow the use of these unwholesome dens to be freely sold to those whose ignorance or poverty keeps them from remonstrance; and men are found willing to draw $21.50 a month, as payment for the privilege of inhaling poison, in places where no right-thinking man would keep his horse, scarcely his pig; and where he would not live himself (or rather die) for any amount of money.

During the long months of winter, all injurious emanations are happily frozen up, like the fabled tunes blown into Munchausen's horn. But when the spring thaw comes, the whole mass of corruption, which has been accumulating on the surface and among the snow, is set free; not only sinking into the unpaved back yards, and there laying by a deep store of pollution to rise up at the bidding of the summer sun, in the form of fever or cholera; but running into and around the dwellings, soaking into the floors, and sponged up by the timber walls, where the reeking colour, premonitory of disease, is hidden behind some tawdry paper; and the heedless victim of ignorance, generally also of intemperance, hires the poisoned coffin in which his wife and little ones are constrained to dwell.

In the more healthy parts of the city, the winter manure is dislodged by the melting snow and precipitated on the solid matter. As the streets rapidly dry, fine dust is formed in immense masses; and while the poor below are wading on bricks through the liquid

stench bowls,* the gentry are inhaling similar pollutions in the form of impalpable and perceptible dust. It is evident that both streets and yards should be cleared as soon as ever the substance is soft enough to be removed; that the liquid manure, instead of running to waste in the river, should be employed to fertilize the land; that all back yards not used for cultivation, should be paved with brick or stone; that houses should be drained with some other material than wooden troughs; that the plan of fixing frame houses on wooden legs over swamps should be expressly prevented; and that a complete system of sewerage should be provided for the poorer, far more than even for the wealthier portions of the community.

The mere fact of sewering and cleansing 20 streets in Manchester, inhabited by 3,500 persons, reduced the mortality from 31 to 25 per 1,000; that is, prevented 21 deaths and 588 cases of sickness in 7 months. In Windmill Court, London, there were 41 cases of sickness in 7 months. The landlord paved and sewered it, and supplied it with water; and in the same space of time afterwards, there were only 2 cases. He did it at his own expense, and "made a good thing of it."—When the Manchester Council swept their streets by machine every day, they found that the roads scarcely ever needed repair. In Aberdeen and Perth, the expense of the similar daily cleansing was more than covered by the sale of the manure.

What is poison to man is food to the plant. One pound of urine contains all the elements necessary for one pound of wheat. The fœcal matter of two adults is sufficient manure to raise an acre of corn or pease; or that of one man will produce an acre of turnips, if the green matter is returned to the soil. The value of manure in Flanders is $9·25 per man. Land near Edinburgh, which used to let for only $15 per acre, now fetches from $100 to $200 per annum, simply from being irrigated with town refuse. And in the town of Rugby, the system of drainage is so complete that whatever is deposited in the dwelling in the morning, by noon is spread over the fields in a minute state of division, before decomposition has time to develope its poisonous stench.

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* The myriads of flies of which the inhabitants complain, are the necessary result of the putrid refuse. In the present state of the city, they act as nature's scavangers, and should be reckoned among the greatest blessings.

As the cost of sanitary measures is generally the greatest obstacle to their adoption, it may be well to inquire whether their neglect is not still more costly. The following is an attempt to exhibit the—

ANNUAL PECUNIARY LOSS TO THE CITY OF MONTREAL, RESULTING FROM "LAISSEZ FAIRE."

Value of manure, now run to waste or breeding sickness, on 65,000 inhabitants, besides animals, say at $3,.....	$195,000
Loss from 191,100 weeks of preventible sickness, at $3 per week,.	573,300
Cost of 1,365 funerals at $15 each,.....	20,475
Supposed pecuniary value of 1,365 lives; estimating a Free Canadian simply as property, at Elihu Burritt's tariff of $300 per head,.....	409,500
Maintenance of orphans, &c., say.....	1,725
Total,.....	$1,200,000

To which ought to be added an indefinite amount for injury to stocks of goods, dress, furniture, &c., resulting from dirt and dust.

These and similar facts prove that, however expensive sanitary reform may be, the present system is far more so; and that however difficult it may be to cleanse the Augean stables in the back yards of Montreal, it is the duty of the Council to see that the wages of death are no longer wrung from the hard earnings of the poor, but that all who undertake to let houses shall be compelled to put them and their surroundings into a condition favourable to health and life.

If a Statistical Society were formed to collect and verify information on this and other social subjects, it might be able to lay important facts before the governing bodies; and might point out the causes of error in the present returns, with a view to their correction in the forthcoming census. The English "Health of Towns Associations" have also been extremely useful, (1) in making reports of the actual condition of their respective localities, by visiting from house to house; (2) in diffusing information among the masses of the people by free lectures and plainly written tracts; and (3) in watching and acting upon city officials and owners of property, in a way which private individuals hesitate to do.

When Edwin Chadwick, Esq., the first mover of sanitary reform in England, visited the Exhibition of Industry in Paris, every opportunity was offered to the deputation from the Society of Arts, of which he was a member, to see the notabilia of that magnificent capital. The Emperor afterwards asked him what were his impressions of the city. He replied by giving Louis Napoleon a

half-hour's disquisition on the sanitary condition of Paris, and the necessary steps to be taken for its immediate improvement. The courtiers were filled with indignation; His Majesty answered by a smile.—In the same way I have endeavoured to show my grateful appreciation of the kindness of the Canadian people, by applying the knowledge gained in the old country to the altered conditions of the new, and shall be rejoiced indeed if what has been written, strongly, it may be, but calmly and advisedly, should be received, neither with indignation nor with smiles, but with a determination to amend the laws of disease and death, by which the inhabitants of Montreal have thus far been governed. Let the Queen City of the North, that sits enthroned on the Royal Mount, with for her footstool the River of Freedom, her breast adorned with princely mansions, her jewels of colleges and cathedrals, her boast of commerce and of wealth, be clothed with the white robe of Health, pure as her winter's snows, and crowned with the diadem of Life, bright as her summer's sun, so that her future may fulfil the prediction of the Prophet,—

"My people shall not labour in vain,
"Nor bring forth children for early death.
"No longer shall there be an infant of days,
"Nor an old man that hath not fulfilled his time:
"For he that dieth at a hundred years shall die a youth,
"And the sinner dying at a hundred years shall be held accursed.
"They shall not build, and another inhabit;
"They shall not plant, and another eat:
"For as the days of a tree shall be the days of my people;
"Yea, long shall they enjoy the works of their hands."

Is. lxv. 20–23

Boston, May 13, 1859.

10

Honorable P. J. O. Chauveau

avec les compliments de l'Auteur